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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,466	04/28/2005	Andrea Venturelli	5625	6473
26/936 7590 09/02/2009 SHOEMAKER AND MATTARE, LTD 10 POST OFFICE ROAD - SUITE 100 SILVER SPRING, MD 20910				
EXAMINER PATEL, PRITESH ASHOK				
ART UNIT		PAPER NUMBER		
3763				
MAIL DATE		DELIVERY MODE		
09/02/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/531,466

**Applicant(s)**

VENTURELLI, ANDREA

**Examiner**

PRITESH PATEL

**Art Unit**

3763

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-26 and 28-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-26 and 28-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date 04/21/2009
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 20-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwartz et al. (US 5573520) in view of Swanson (US 5743876).

Concerning Claim 20-26 and 28-35, Schwartz et al. discloses a flexible tubular device for use in medical applications comprising of a helical slit (52), the tube (50) made of a flexible material preferably a metal (Fig 10, Column 7, Lines 60-65). Schwartz et al. also discloses the use of PTFE as a coating for the tube (50) in order to decrease friction and increase biocompatibility (Column 4, Lines 30-34). Schwartz et al. fails to disclose a discontinuous helical pattern, a plurality of notches, the distance of separation increasing as the slits near the proximal section, and diameter of the tube. Swanson discloses a discontinuous pattern of a plurality of notches where the axial distance between notches increases from a distal to a proximal direction. (Fig 10). Swanson teaches that the slits can cover any portion of a tube from a section to a whole tube and that a strong flexible material can be used for the tube, preferably metal, and that the number of the plurality of notches on the tube can be changed to increase or decrease flexibility of the tube (Column 9, Lines 4-11). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Schwartz et al. with a discontinuous pattern of notches where the distance between notches increases in an axial direction from distal to proximal portions as taught by Swanson to increase

flexibility of a tube for maneuvering within the body. It would be obvious to one skilled in the art at the time of the invention that modified Schwartz et al. could have been made by numerous manufacturing techniques to reduce size of the tube without changing functionality or concept. The notches would follow the helical pattern taught by Schwartz et al., but be discontinuous as taught by Swanson. The angle of the partial helical lines could have been at varied angles depending on flexibility requirements of the tube. It would further have been obvious to one of ordinary skill in the art that a slit with to circular ends of larger diameter than width of said slit would relieve stress on a tube as is known in the mechanical art and would be used as a product design option in consideration of materials and manufacturing practices

3. Concerning Claim 27, Schwartz does not disclose a circular notch with a diameter wider than the width of the slit. Swanson discloses an embodiment of a tube that has a plurality of open orifices with a diameter wider than that of the plurality of notches (Fig 21 Swanson). It would have been obvious to one of ordinary skill at the time of the invention to modify Schwartz et al. with a circle like aperture as taught by Swanson. The orifices on a tube could have allowed for better deliver across a guide wire or an outlet for an infusion tube, but more specifically allowed for distinct maneuverability characteristics based upon the amount of orifices present and the density per length of tube.

### ***Response to Arguments***

4. Applicant's arguments filed 05/27/2009 have been fully considered but they are not persuasive. Though the prior art does not discloses directly a design as disclosed by

the applicant, the examiner contends that the amendments is an obvious variation and would not only provide the same function as the previous claim disclosed but would have varying significance depending on the material used for a tube.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **PRITESH PATEL** whose telephone number is (571)270-7025. The examiner can normally be reached on Monday-Friday 7:30Am-5:00PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nicholas Lucchesi can be reached on (571)272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. P./  
Examiner, Art Unit 3763  
08/28/2009

/Nicholas D Lucchesi/  
Supervisory Patent Examiner, Art Unit 3763